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ABSTRACT

In both within-network and between-network analyses of the self, research results have indicated internal consistency, construct and discriminant validity in terms of multitrait-multimethod techniques, with discriminating weights for gender and age. Factor analyses have yielded a variety of clusters, including most often a self concept of ability. When analyzing student self concept, the factors most often yielded are academic self, school self, and a humanistic self. Additional study into components of the self--with the focus on "process"--the self as construct would seem to operate upon internal representations. Accordingly, the evidence so far accumulated suggests not a general self concept influencing all behavior of individuals and not a temporal, hierarchical model with the flow downward from the top (general self) in terms of causal agents or historical antecedents with a general self developing in time before role-specific selves. The paradigm seems to have a taxonomic thrust with differentiating self-perceptions--varying in breadth and depth--with interpersonal and intrapersonal dynamics, suggesting further an interfacing of cognitive and behavioral dimensions. (Author)

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COMPONENTS OF STUDENTS' SELF-RELATED COGNITIONS

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In both within-network and between-network analyses of the self, research results have indicated internal consistency, construct and discriminant validity in terms of multitrait-multimethod techniques, with discriminating weights for gender and age. Factor analyses have yielded a variety of clusters, including most often a self concept of ability. When analyzing student self concept, the factors most often yielded are academic self, school self, and a humanistic self. Additional study into components of the self--with the focus on "process"--the self as construct would seem to operate upon internal representations. Accordingly, the evidence so far accumulated suggests not a general self concept influencing all behavior of individuals and not a temporal, hierarchical model with the flow downward from the top (general self) in terms of causal agents or historical antecedents with a general self developing in time before role-specific selves. The paradigm seem to have a taxonomic thrust with differentiating self-perceptions--varying in breadth and depth--with interpersonal and intrapersonal dynamics, suggesting further an interfacing of cognitive and behavioral dimensions.

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Nomological research is undertaken increasingly in the are of self-concept development. Typically, there are more studies available of the between-network variety (i.e., comparing self-concept scores with some other variable, such as achievement) than of the within-networks mode (i.e., subunits of the self construct). Even though the within-network studies, which define and clarify the construct of self concept, should precede intervariable research, those conducted to date have not provided sufficient evidence as foundation for effective between-network research. Part of the problem in this regard is inadequate theory-formulation.

Beyond definitions and descriptions of development, a model is required for a more effective explanation of phenomena--a theoretical framework for generalizing and particularizing the observations of human behavior and events. Authors and researchers have tended to go primarily in one of two directions.

(1) The first and the oldest, the "nomothetic" approach, maintains that there is a general self concept which is evide evidenced in the characteristics that individuals apply to themselves. When measuring these characteristics, correlation clusters and factor-analytic traits provide the requisite evidence (Loevinger, 1966). These characteristics, as descrip-

tive of the general self concept, are then used to explain behaviors in various settings (Lowe, 1961). Studies which establish the self concept as a unitary phenomenon continue to the present time (e.g., Rosenberg & Simmons, 1973). Since the self concept is frequently viewed as an outcome variable of experience, then the global self position is not unexpected (Norwich, 1982). On the other hand, a global self concept may be concluded because the measures themselves are global. For example, Winne, Marx, and Taylor (1977) discovered convergence of physical, social, and academic concepts of self while analyzing for discriminant validity.

A similar attempt at construct-resolution was waged in the formulations of intelligence theory. Spearman (1927) initially developed a position of intellectual power which he viewed as predominantly a generalized function, called the "g" factor. He believed that all individuals possess this factor in various degrees which is common to all mental activity. Spearman then postulated specific factors--"s" factors--which would be involved in different tasks (i.e., similar to the different traits in self-concept theory). The g factor provided the most crucial explanation of an individual's level of intelligence, and the s factors supplied the differential dimensions of the individual's level of mental functioning.

(2) The second direction in self modeling, the "idiographic" approach, suggests instead individualized explorations without resulting necessarily in a general factor of self except as the top rung of the hierarchy. This model is also

seen as organized and multifaceted, with perceptions of behavior at the base, inferences about the self in specific kinds of activities in the middle, culminating in a global self. The top is considered to be relatively stable; but as one descends the hierarchy, self concepts become increasingly situation-dependent and open to environmental changes. This is the position taken by more recent authors (e.g., Gage & Berliner, 1975; Shavelson, Huberner, & Stanton, 1976). Marsh and Smith (1982) believe that there is limited empirical support for the multidimensionality of the self concept in the hierarchical position outlined above. They argue that, if the correlations between different traits are higher than convergent coefficients, then the evidence is against the distinctiveness of multiple traits. Marsh and Smith further suggest that the self may contain an intellectual component.

The analogy to intelligence theory is indicated with several authors. Thurstone (1943), in his concept of primary mental abilities, suggested that intelligence is an expression of several highly specific factors. These factors may be relatively independent of one another although experimentation has often revealed evidence for a basic general factor in addition to the semi-autonomous specific factors. In providing a multi-dimensional model, Thorndike (1927) views intelligence as consisting of highly specific processes. If a high degree of relationship is indicated among any of these processes, mental functioning would be indicated on the basis of common elements.

Harter (1981), in postulating the independence of these second-order factors--primarily the cognitive, social, and physical--and in viewing the self as a superordinate component, provides a summation theory of this second position. In light of recent developments in brain research, however, there seems to be a third position which is patterned upon the work of Garfinkel in Canada and Guilford's work on intelligence (1959, 1968) suggesting a taxonomic model, which conceptualizes a three-way classification involving process, content, and products by way of factor-analytic methods. The present authors have previously proposed a similar and alternative theoretical direction (Soares & Soares, 1977, 1980b, 1982), supported by the research of Lillemyr (1982) and that of Horrocks and Jackson (1972) as presented by Donald Super (1982). This viewpoint includes role theory effect and the influence of significant others on self-concept development. The series of research results relative to the studies supporting this third position is presented in Tables 1-9 and Figures 1-2.

In all cases, the students were administered the Affective Perception Inventory (API), which interfaces self as a person and as a student (Soares & Soares, 1980a). The inventory measures nine dimensions of the self: (1) Self Concept as a person, (2) Self as a Student, (3) Self in Language Arts, (4) Self in Mathematics, (5) Self in Science, (6) Self in Social Studies, (7) Self in the Arts, (8) Self in Physical Education, and (9) Self in the School Environment. The API is a semantic

differential device within a forced-choice format of four spaces of distance between pairs of sentences possessing dichotomous traits within the nine dimensions described. The nine scales were submitted to a multitrait-multimethod matrix design (Campbell & Fiske, 1959). The analysis proceeded on the basis of three raters--Self, Peers, and Teachers--with the overall matrix noted in Table 1. The monotrait-monomethod coefficients indicated moderately high to high internal-consistency reliability. The monotrait-heteromethod validity coefficients demonstrated some instances of convergent validity, especially between Self and Peers. The heterotrait-monomethod and heterotrait-heteromethod coefficients suggested differential discriminant validity in that three varied pictures emerged: (1) A frequent clustering of Self Concept, Student Self, Language Arts, and School Self Perceptions; (2) divergence of Mathematics and Science Self Perceptions from each other as well as from (1) above and (3) below; and (3) a lack of consistency implicit in the responses from the Arts and Physical Education Self Perceptions scales.

Tables 2-5 provide a summary of the maximum, minimum, and median coefficients by age/grade groupings for the M-M correlations (reliability indicators), and the validity correlations for the M-H, H-M, and H-H comparisons. The M-M correlations, as obtained by the split-half method of Rulon (1939), yielded fairly high reliability coefficients of internal consistency. The highest values were obtained on the

self-ratings and for grades 10-12. The M-H validity coefficients indicated the greatest agreement of self- and peer-ratings (.73) from School Self Perceptions in grades 7-9 and a coefficient of .84 in grades 1-3. Most of the M-H coefficients were larger than the median heterotrait-heteromethod correlations.

The H-M correlations tended to show the greatest convergence of Self Concept and Student Self and the greatest divergence (or lowest convergence) on Mathematics and Physical Education Self Perceptions. As with the M-H and H-M coefficients, the H-H correlations were highest for grades 1-3 and lowest for grades 10-12.

In employing discriminant analysis on the same data, the initial procedures used the nine self-concept scores as discriminating variables. Because of the eigenvalues generated and the level of significance for the Wilks' Lambda method, only the first three derived functions seemed to have importance for further discussion. Therefore, these were then labeled "Academic Self," "School Self," and "Humanistic Self," respectively, as noted in Table 6. Figure 1 illustrates the relative positions of the twelve-grade centroids (mean vectors). The percentage of grouped cases correctly classified was 72.21% for the grades.

A summary of the factor analysis is indicated in Table 7. For all age levels, the number of factors generated for Self as a person, Self as a Student, and Perceptions of Self in the School Environment tended to be greater than for the per-

ceptions of self in most of the disciplines. The Arts Self resulted in the greatest number of factors among the subject scales for all groups, although the Language Arts scale for the high school students also generated a high number of factors. The Mathematics and Science Self scales indicated the smallest number of factors over the age groupings. The highest factor loadings were found with the high school students in comparison to the students in the middle grades and the primary grades. The lowest factor loadings were found among the primary grade students.

In viewing the percent of variance of Factor I only on each of the scales, the differences among the age groupings are most striking (Table 8). Table 9 provides an age summary. The first factor extracted from the items was generally categorized as "self-confidence" or "a sense of competence." A major conclusion supported the position that the process of self-conceptualization begins somewhat earlier than generally believed and that it is a dynamic of infinite diversity.

Phase II/ International Project

Another track of the research series has been the administering of the API in other countries. A partial reporting of that effort will be given here in order to review from a different perspective individual self-perceptions in light of the third theoretical position. Table 10 compares the means and standard deviations of high school students randomly selected from the northeastern section of the United States with those from comparable school levels outside Rome, Italy.

Table 10 indicates that generally the Italian students demonstrated higher means on the nine self scales of the API than did the American students. For males the exceptions appeared on scales 5 (Science Self) and 6 (Social Studies Self). For the female students, the exceptions fell on scales 3 (Language Arts Self), 5 (Science Self), and 7 (the Arts Self). In comparing the American students alone, the males had higher mean scores on Self Concept, and Self in Science, Mathematics, Social Studies, and Physical Education. Among the Italian students, the males showed higher means on the same five scales as did the American males plus scale 7 (Self in the Arts).

Another example of international differences is shown in Table 11. Within the Spanish group, male students tended to demonstrate much higher mean values than females on most of the scales. In comparing the Spanish students with the Italian, there was a much wider spread of the coefficients over the nine scales than was found from the Spanish group. From another perspective, how Spanish students viewed themselves on one self scale tended to affect how they saw themselves on other scales. The Italian group, in contrast, was much more discriminating in their self-pictures. The comparable American group usually fell somewhere inbetween these other two groups.

Conclusions

The results cited above do not provide support for either the global self concept or the hierarchical model. On the

contrary, without a clear pattern for one or the other, the evidence seems to support more definitively a taxonomic paradigm which allows for self-perceptions developing independently according to experiences, capabilities, treatment from others, relationships with significant others, and individualized pattern-detecting mechanisms typically discussed in brain-research reports. In terms of the last point, future directions for self-concept research might very well follow into the frontier of brain research since many authors seem to feel that self-concept development is a cognitive process.

For example, if there continues to be agreement that the number of connections of dendrites is more important than the total number of neurons in the brain, then does the number of dendrites imply a more complex network of self concepts? (Restak, 1979)? What are the implications for self-concept development from the finding that some areas of the brain grow earlier than others and that, further, sudden bursts of chemical energy or sustained changes in brain growth take place at some ages and not others (Epstein, 1978)? It is said that during rapid growth times, new knowledge is more quickly assimilated; when brain development slows down, the acquisition of new knowledge is also lessened. What type of impact that such a process have on self-concept development?

What about the finding that the rate of formation of certain critical brain enzymes is increased in response to stimulation? An even more provocative discovery was that, in handled rats, the rate of brain growth "was temporarily

slowed to allow for longer periods of development and, consequently, achievement of a better-developed brain with more cells and more complex connections" (Globus & Altman, 1975). We have some indication of the effect of nutrition factors on brain development. Do we also know whether nutrition affects our perceptions, including those of ourselves? Dr. Janina Galler, a child psychiatrist at the Boston University Medical Center, has discovered that generations of malnutrition affect the mother-child interactional process. The initial nutritional problem results in behavioral consequences that interfere with mothering. It is this failure of mothering, rather than genetic change, that is passed on and can be measured several generations later, at least with rats. The implications for self-concept development are clear when the variable of significant others is addressed. As biologist Sir Julian Huxley has often warned, "An isolated brain is only a piece of biological nonsense as meaningless as an isolated individual."

Research into the functions of the two brain halves provides some information about the possible specialization of the two hemispheres. What are the gender implications of results that show females performing best in tasks processed by the left hemisphere while males did best in right-hemisphere tasks in terms of self-concept development?

Other findings indicate that the brain operates by programs of function (Young, 1978). After building and storing hundreds of programs, we supposedly then select the appropriate one for the occasion and let it "play" like a tape recorder.

We know which program to play because we recognize the pattern. Each brain's repertoire of programs is distinctive, having been developed by the learner's own efforts. The process of remembering, therefore, is a problem of retrieving the information stored (Tulving & Thompson, 1980).

The technological leaps which are expected by the 21st century would seem to indicate that, as we develop more precise and effective measuring devices which can seek out the secrets of the brain and mind, we may discover that contemporary mysteries of the self will also be solved.

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Table 1

Multitrait-Multimethod Matrix

		Method 1								
		1	2	3	4	5	6	7	8	9
Method 1										
Scale 1	1	(.94)								
	2	.47	(.79)							
	3	.44	.66	(.89)						
	4	.27	.38	.27	(.81)					
	5	.41	.35	.37	.37	(.88)				
	6	.38	.39	.33	.25	.35	(.88)			
	7	.25	.42	.46	.13	.33	.23	(.63)		
	8	.45	.35	.23	.24	.41	.29	.21	(.84)	
	9	.45	.41	.49	.40	.46	.38	.38	.35	(.83)
Method 2										
Scale 1	1	[.49]	.32	.23	.20	.30	.11	.03	.32	.38
	2	.33	[.50]	.42	.40	.38	.20	.03	.19	.48
	3	.12	.45	[.49]	.41	.27	.09	.14	.05	.53
	4	.17	.38	.29	[.55]	.31	.07	.11	.19	.52
	5	.17	.46	.30	.25	[.51]	.14	.01	.22	.33
	6	.25	.36	.43	.24	.20	[.39]	.18	.16	.42
	7	.09	.17	.15	.09	.04	.11	[.36]	.02	.26
	8	.15	.14	.22	.05	.05	.20	.09	[.44]	.19
	9	.34	.50	.42	.47	.36	.16	.26	.14	[.76]
Method 3										
Scale 1	1	[.37]	.60	.29	.03	.13	.21	.17	.24	.23
	2	.30	[.74]	.41	.06	.23	.20	.19	.21	.36
	3	.29	.43	[.51]	.10	.28	.30	.24	.19	.43
	4	.06	.28	.23	[.47]	.25	.09	.05	.20	.26
	5	.22	.42	.27	.23	[.47]	.17	.03	.06	.30
	6	.25	.27	.37	.22	.14	[.47]	.07	.03	.46
	7	.06	.08	.20	.10	.08	.12	[.30]	.16	.23
	8	.29	.34	.34	.16	.11	.12	.02	[.33]	.33
	9	.24	.29	.24	.04	.23	.13	.20	.35	[.34]

		Method 2								
		1	2	3	4	5	6	7	8	9
Method 1										
Scale 1	1	[.35]	.36	.30	.03	.14	.15	.14	.07	.52
	2	.36	[.40]	.11	.08	.12	.25	.12	.08	.62
	3	.03	.40	[.57]	.39	.36	.13	.17	.02	.32
	4	.22	.16	.31	[.29]	.20	.18	.24	.02	.09
	5	.20	.28	.36	.13	[.30]	.26	.31	.38	.12
	6	.02	.03	.09	.05	.15	[.23]	.20	.17	.01
	7	.33	.09	.20	.11	.04	.20	[.26]	.17	.31
	8	.13	.27	.07	.26	.18	.20	.20	[.27]	.12
	9	.46	.51	.08	.21	.13	.22	.14	.11	[.80]
Method 2										
Scale 1	1	(.82)								
	2	.49	(.71)							
	3	.51	.63	(.80)						
	4	.51	.62	.42	(.85)					
	5	.27	.50	.27	.50	(.81)				
	6	.38	.52	.48	.53	.36	(.78)			
	7	.39	.36	.40	.35	.34	.34	(.61)		
	8	.27	.33	.25	.22	.32	.38	.30	(.69)	
	9	.31	.59	.60	.52	.31	.51	.26	.33	(.68)

		Method 3								
		1	2	3	4	5	6	7	8	
Method 1										
Scale 1	1	(.66)								
	2	.72	(.82)							
	3	.71	.73	(.87)						
	4	.09	.27	.31	(.86)					
	5	.14	.41	.45	.52	(.84)				
	6	.42	.46	.44	.13	.27	(.82)			
	7	.08	.04	.22	.10	.12	.20	(.66)		
	8	.28	.36	.29	.22	.14	.13	.03	(.81)	
	9	.48	.70	.70	.21	.21	.28	.11	.27	

KEY: Method 1--Self
Method 2--Peers
Method 3--Teachers

Scale 1--Self Concept
Scale 2--Student Self
Scale 3--Language Arts (English)
Scale 4--Mathematics
Scale 5--Science
Scale 6--Social Studies
Scale 7--The Arts
Scale 8--Physical Education
Scale 9--School

Table 2

Summary of Monotrait-Monomethod Coefficients

for Perceptions of Self, Peers, and Teachers

in Comparison of Grade Clusters

Group	Grade Cluster	Max	Min	Median
SELF	1-3	.88	.40	.56
	4-6	.96	.75	.91
	7-9	.97	.89	.93
	10-12	.98	.91	.96
PEERS	1-3	.80	.44	.63
	4-6	.92	.72	.89
	7-9	.94	.86	.91
	10-12	.96	.89	.92
TEACHERS	1-3	.77	.50	.60
	4-6	.91	.75	.84
	7-9	.93	.89	.90
	10-12	.94	.88	.92

Table 3

Summary of Monotrait-Heteromethod Coefficients

for Perceptions of Self, Peers, and Teachers

in Comparison of Grade Clusters

Group	Grade Cluster	Max	Min	Median
Self/Peers	1-3	.84	.38	.51
	4-6	.70	.45	.53
	7-9	.73	.41	.49
	10-12	.62	.42	.55
Self/Teachers	1-3	.57	.31	.43
	4-6	.71	.30	.55
	7-9	.64	.37	.53
	10-12	.60	.40	.48
Peers/Teachers	1-3	.46	.26	.33
	4-6	.60	.40	.49
	7-9	.61	.30	.49
	10-12	.56	.30	.42

Table 4

Summary of Heterotrait-Monomethod Coefficients

for Perceptions of Self, Peers, and Teachers

in Comparison of Grade Clusters

Group	Grade Cluster	Max	Min	Median
SELF	1-3	.66	.20	.41
	4-6	.51	.17	.37
	7-9	.43	.21	.48
	10-12	.43	.13	.40
PEERS	1-3	.63	.24	.40
	4-6	.56	.22	.38
	7-9	.58	.25	.39
	10-12	.51	.22	.46
TEACHERS	1-3	.73	.03	.32
	4-6	.61	.10	.33
	7-9	.55	.08	.46
	10-12	.52	.09	.27

Table 5

Summary of Heterotrait-Heteromethod Coefficients

for Perceptions of Self, Peers, and Teachers

in Comparison of Grade Clusters

Group	Grade Cluster	Max	Min	Median
Self/Peers	1-3	.52	.03	.34
	4-6	.53	.01	.20
	7-9	.46	.01	.20
	10-12	.42	.02	.24
Self/Teachers	1-3	.50	.02	.34
	4-6	.48	.03	.28
	7-9	.44	.02	.29
	10-12	.45	.04	.33
Peers/Teachers	1-3	.58	.01	.30
	4-6	.61	.02	.18
	7-9	.62	.01	.39
	10-12	.57	.03	.36

Figure 1

Separation of Grade Centroids

and

Approximate Centours in Reduced Space

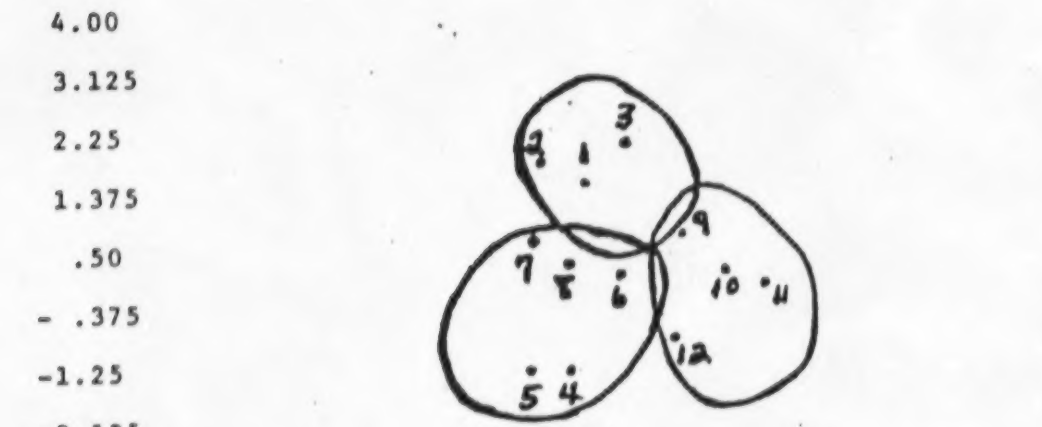

Table 6

Standardized Discriminant Function Coefficients
(First Three Only)

Scores	Function 1	Function 2	Function 3
1	.50204	-.40624	.14985
2	.53106	-.09856	-.28022
3	-.57914	.01035	-.22873
4	-.66798	.22240	-.32604
5	.35827	.06926	.40691
6	.32150	.05216	-.52095
7	-.04176	.07924	.84414
8	-.27749	-.49061	-.17625
9	-.22474	-.48038	-.31509

Table 7

Summary of the Number of Factors Generated

From a Factor Analysis of Self-Scales

Scale*	Test Form +		
	Primary	Intermediate	Advanced
1	7	7	7
2	3	6	6
3	3	4	6
4	4	3	2
5	3	2	1
6	4	2	4
7	5	4	4
8	3	2	3
9	6	5	5

CODES:

+ Primary/Grade 1-3
  Intermediate/Grades 4-8
  Advanced/Grades 9-12

* 1/Self as a Person
  2/Self as a Student
  3/Self in Language Arts
  4/Self in Mathematics
  5/Self in Science
  6/Self in Social Studies
  7/Self in the Arts
  8/Self in Physical Education
  9/Self in the School Environment

Table 8

Percent of Variance Accounted for in Factor I

as Generated from a Factor Analysis of Self-Scales

Scale	Test Forms		
	Primary	Intermediate	Advanced
1	37.4	48.4	54.8
2	69.4	46.1	52.3
3	64.8	59.9	51.3
4	51.9	71.5	92.1
5	68.6	88.7	100.0
6	51.5	85.4	75.7
7	50.5	53.8	52.2
8	68.4	89.2	85.5
9	49.8	64.8	74.9

Figure 2

Configuration of the Etiology

of

Self-Perceptions

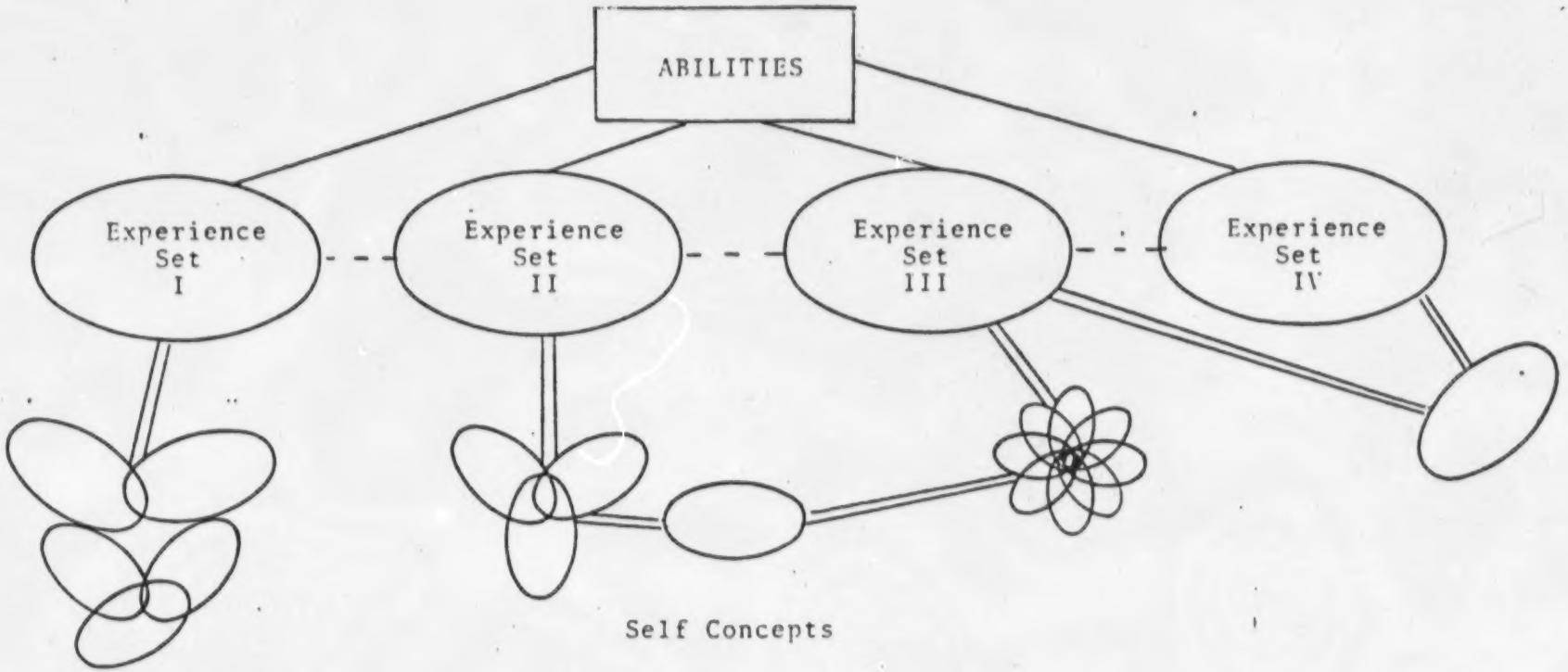

Table 9

Summary of Factor Loadings

Age ° Level	Scales * 1	2	3	4	5	6	7	8	9
A									
No./Factors	7	6	5	2	1	4	4	3	5
High	.78	.99	.83	.82	.88	.94	.79	.90	.81
Low	.34	.29	.24	.36	.41	.38	.14	.31	.41
Median	.54	.54	.55	.66	.72	.65	.63	.75	.60
%/Variance (Factor I)	.55	.52	.51	.92	.99	.76	.52	.86	.75
B									
No./Factors	7	6	4	3	2	2	4	2	5
High	.74	.76	.84	.78	.83	.81	.72	.79	.79
Low	.12	.18	.24	.19	.68	.24	.22	.25	.31
Median	.34	.42	.45	.56	.80	.53	.58	.61	.52
%/Variance (Factor I)	.48	.46	.60	.72	.89	.85	.54	.89	.65
C									
No./Factors	7	3	3	4	3	4	5	3	6
High	.67	.80	.89	.87	.87	.72	.95	.70	.98
Low	.12	.19	.10	.12	.26	.30	.16	.15	.01
Median	.47	.43	.37	.52	.42	.47	.42	.41	.47
%/Variance (Factor I)	.37	.69	.65	.52	.69	.52	.51	.68	.50

CODE: ° A: High School
B: Middle Grades
C: Primary Grades

* 1: Self Concept as a Person
2: Self Concept as a Student
3: Self in Language Arts
4: Self in Mathematics
5: Self in Science
6: Self in Social Studies
7: Self in the Arts
8: Self in Physical Education
9: Self in the School Environment

Table 10

A Comparison of the Means and Standard Deviations on the Nine Scales of the API for American and Italian High School Students

Scale	Males				Females			
	U.S.A.		Italy		U.S.A.		Italy	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1	25.00	11.69	27.38	8.90	18.15	14.71**	25.95	12.72
2	14.00	16.05	* 18.50	11.70	19.15	13.60	*22.82	13.35
3	7.45	18.64	* 11.25	11.42	14.54	15.97	*11.50	14.06
4	4.09	20.67	** 11.63	7.96	3.23	15.48**	10.55	16.24
5	15.45	16.87	* 10.63	6.99	11.62	17.58	9.36	18.44
6	19.45	10.72	* 15.50	11.14	5.46	15.90	5.91	17.55
7	11.09	14.27	13.50	9.49	15.08	12.96	14.27	12.56
8	16.09	8.92	16.25	9.41	6.15	16.41**	15.23	12.45
9	8.91	21.98	** 24.75	15.82	14.92	25.18**	31.18	21.26

* $p < .05$

** $p < .01$

Table 11

Intercorrelation Matrix of the API Scales for Italian and Spanish High School Students

Group	Scales	Scales 1	2	3	4	5	6	7	8	9
Italian	1	1.00	.61	.48	.11	.23	.17	.50	.34	.26
	2		1.00	.55	.21	.20	.10	.49	.20	.67
	3			1.00	.12	.65	.36	.32	.11	.43
	4				1.00	.04	.41	.03	.05	.41
	5					1.00	.42	.25	.24	.40
	6						1.00	.10	.09	.38
	7							1.00	.35	.40
	8								1.00	.24
	9									1.00
Spanish	1	1.00	.76	.68	.52	.44	.43	.78	.44	.61
	2		1.00	.73	.59	.57	.45	.73	.72	.48
	3			1.00	.70	.55	.47	.73	.71	.41
	4				1.00	.50	.30	.63	.87	.53
	5					1.00	.42	.68	.78	.53
	6						1.00	.58	.63	.57
	7							1.00	.61	.50
	8								1.00	.54
	9									1.00